REMARKS

Claims 1-20 were pending in this application.

Claims 6-10 and 19 have been allowed.

Claims 1-5 and 11-16 have been rejected.

Claims 17, 18, and 20 have been objected to.

Claims 1, 4, and 11 have been amended as shown above.

Claims 3 and 20 have been cancelled.

Claims 21 and 22 have been added.

Claims 1, 2, 4-19, 21, and 22 are now pending in this application.

Reconsideration and full allowance of Claims 1, 2, 4-19, 21, and 22 are respectfully requested.

I. ALLOWABLE CLAIMS

The Applicants thank the Examiner for the indication that Claims 6-10 and 19 are in condition for allowance. These claims have not been amended and therefore remain in condition for allowance.

The Applicants also thank the Examiner for the indication that Claims 17, 18, and 20 would be allowable if rewritten in independent form to incorporate the elements of their respective base claims and any intervening claims. The Applicants have amended Claim 11 to incorporate the elements previously recited in Claim 20. As a result, the Applicants respectfully submit that Claim 11 is in condition for allowance. The Applicants respectfully request full

allowance of Claim 11 and Claims 12-17 depending from Claim 11.

II. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejects Claims 1-4 and 11-13 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,647,485 to Nguyen et al. ("*Nguyen*") in view of U.S. Patent No. 5,001,629 to Murakami et al. ("*Murakami*"). The Office Action rejects Claims 5 and 14-16 under 35 U.S.C. § 103(a) as being unpatentable over *Nguyen* and *Murakami* in further view of Applicant Admitted Prior Art ("*APA*"). These rejections are respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. (*MPEP § 2142; In re Fritch, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992)*). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. (*MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984)*). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. (*MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993)*). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. (*In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Grabiak, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985)*).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. (*In re Bell, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993)*). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. (*MPEP § 2142*).

As noted above in Section I, Claim 11 is in condition for allowance. As a result, the Applicants respectfully request withdrawal of the § 103 rejection and full allowance of Claims 11-17.

Regarding Claim 1, the Office Action acknowledges that *Nguyen* fails to disclose a "plurality of register transfer units" that "facilitate transfers of data among at least two interface registers." (*Office Action, Page 2, Last paragraph*). The Office Action then asserts that *Murakami* discloses these elements of Claim 1. (*Office Action, Page 2, Last paragraph*).

Claim 1 has been amended to recite that "at least one datapath unit" is "operably coupled to the plurality of register transfer units" and "facilitates a transformation of at least one data item of the data that is transferred among the interface registers." The Office Action relies on *Nguyen* as disclosing, teaching, or suggesting these elements. (*Office Action, Page 3, Third*

paragraph). However, the Office Action acknowledges that *Nguyen* fails to disclose a "plurality of register transfer units." As a result, *Nguyen* cannot possibly disclose, teach, or suggest at least one datapath unit that is "operably coupled to the plurality of register transfer units" as recited in Claim 1.

Moreover, the only component of *Murakami* that could "facilitate transfers of data" among at least two "registers" is a wire coupling "O" and "I" ports of registers R1 and R2 in Figure 2 of *Murakami*. As a result, the Office Action must be relying on that single wire as disclosing, teaching, or suggesting the "plurality of register transfer units" that "facilitate transfers of data among at least two interface registers" as recited in Claim 1.

In light of this, the Patent Office must show that *Nguyen* or *Murakami* discloses, teaches, or suggests "at least one datapath unit" that would be coupled to the wire between registers R1 and R2 in *Murakami*, where the datapath unit facilitates a "transformation" of data that is transferred over that wire. The Patent Office cannot make this showing.

Nguyen lacks any mention of transferring data between registers in a register array 472 using a "plurality of register transfer units." Beyond that, the cited portion of *Nguyen* (column 32, line 50 – column 33, line 35) contains absolutely no mention of any "datapath unit" that is coupled to a wire or other "transfer unit" facilitating the transfer of data between registers in the register array 472 of *Nguyen*. Because *Nguyen* lacks any mention of transferring data between registers using a "plurality of register transfer units," *Nguyen* cannot disclose, teach, or suggest "at least one datapath unit" that is "operably coupled to the plurality of register transfer units" as recited in Claim 1. Similarly, *Murakami* also lacks any mention of coupling any "datapath unit"

to the wire between registers R1 and R2 of *Murakami*, where the datapath unit facilitates a "transformation" of data that is transferred between the registers R1 and R2.

For these reasons, the Office Action does not establish a *prima facie* case of obviousness against Claim 1 (and its dependent claims). Accordingly, the Applicants respectfully request withdrawal of the § 103 rejections and full allowance of Claims 1-5 and 11-16.

III. NEW CLAIMS

The Applicants have added new Claims 21 and 22. The Applicants respectfully submit that no new matter has been added. At a minimum, the Applicants respectfully submit that Claims 21 and 22 are patentable due to their dependence from an allowable base claim. The Applicants respectfully request entry and full allowance of Claims 21 and 22.

IV. CONCLUSION

For the reasons given above, the Applicants respectfully request reconsideration and full allowance of all pending claims and that this application be passed to issue.

SUMMARY

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Applicants respectfully invite the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication (including any extension of time fees) or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

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